Business Plan
For
Rural Alaska Fuel Services, Inc.

Prepared for

The Denali Commission

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September 17, 2003
Revision 1

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Section 1 Executive Summary

This is a business plan for a nonprofit corporation designed to contract for the operation and maintenance of bulk fuel storage plants constructed by the Denali Commission and granted to selected communities. A nonprofit corporation was selected to provide the most flexible governance and membership possibilities and because state law is believed to accommodate such an organization for the purpose intended. The corporation is called Rural Alaska Fuel Services, Inc. (RAFS).

The purpose of the corporation is to provide an alternative means for managing and operating rural tank farms, to bring economies of scale and expertise to bear on tank farm operations not available to individual communities, and to take advantage of bulk fuel purchasing for multiple communities. The project included conducting a marketing survey which showed a high level of interest in these services.

The financial analysis demonstrates that economies of scale result in lower cost if ten or more communities participate. However, a vital assumption on which the financial analysis is based is that all villages not subscribing to the services would operate in full compliance with the Denali Commission's sustainability criteria. If villages are allowed to operate as they have in the past, they will operate at a lower cost and will not have incentive to use RAFS.

Using conservative estimates, it will take three to four years to recruit enough members to have positive net margins. The financial assistance required over the first three years is estimated to be $435,120. This includes the cost to set up the corporation, purchase materials and equipment required, and operate. The assistance would allow the corporation to begin operating village tank farms at a cost comparable to what it is estimated individual villages would have to pay to operate their tank farm properly. RAFS would train and use local labor to perform the day to day tank farm operations and would pay an estimated $20,000 annually in local wages.

I addition to the future economic incentive for RAFS, there are persuasive practical reasons for forming such a company. The Denali Commission's legacy depends on the long term, successful operation of the infrastructure built in rural Alaska. Although there are communities capable of fulfilling the Commission's goals, there are those who lack the expertise and the money to succeed. Some villages expressed a desire to have someone else operate the tank farm so they can concentrate their energy elsewhere. The alternative for these communities is to contract with RAFS for operations and maintenance of their tank farms. For those communities who try but fail to meet the stringent new operating requirements, RAFS is the perfect safety net and would serve as the ideal Secondary Operator the Denali Commission has been looking for.

RAFS offers a means to achieve the Denali Commission's goals of economic advantages and long term sustainability of rural tank farm operations. The startup costs are modest when compared with the advantages gained and the enormous value of the assets at risk.

Section 2 Overview

Alaska rural communities are increasingly dependent on fuel; however, fuel operators in the communities have not generated sufficient margins from fuel sales to maintain the tank farms. Deteriorating bulk fuel storage plant have become a serious source of pollution. To correct this situation, the Denali Commission has funded construction of new, state of the art, bulk fuel storage plants and granted the plants to selected communities. A condition of these grants is that the tank farms be maintained and operated in accordance with all applicable state and federal regulations.

New federal regulations have increased the requirements for inspection and maintenance of fuel storage tanks. These new requirements increase the complexity of bulk fuel storage plant operation and maintenance and require more technical skills and effort than were needed in the past. These factors increase the cost of plant maintenance and operations, costs which ultimately may be beyond the capability of some communities.

To make the necessary skills available to communities and minimize their cost, this plan is drafted to form a new company which combines operating efficiencies, standardization, and regionalization of the management and business skills required to properly operate a modern tank farm in the present regulatory environment. The new company, Rural Alaska Fuel Services, Inc. (RAFS) is a nonprofit corporation formed to provide contract management and plant operation services to communities granted new tank farms.

See APPENDIX A for list of the services provided by RAFS.

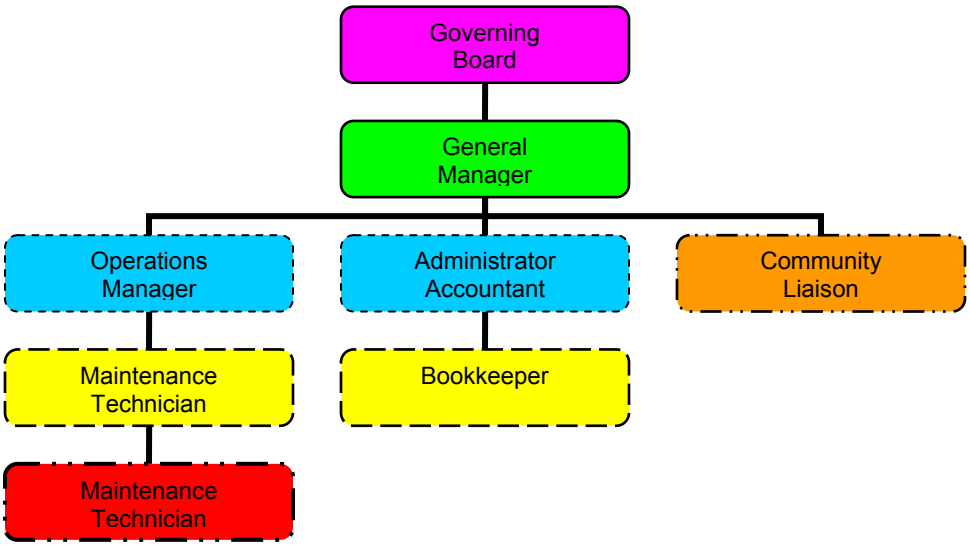
Section 2.1 *Service Area*

As currently envisioned, RAFS services would be available to any entity operating a tank farm constructed by the Denali Commission for the benefit of rural communities. The initial service area addressed in this plan is the Yukon-Kuskokwim delta in southwest Alaska. This is where most of the new tank farms have been constructed or are planned for construction. However, villages on the Seward Peninsula and in northwestern Alaska have also been considered candidates for RAFS services.

Section 3 Management Structure

The management structure includes the business, operational, and technical skills necessary to properly operate a bulk fuel storage plant in rural Alaska under today's regulatory standards. Beyond the managements structure, local labor would be trained and hired to perform the daily maintenance and operating activities required to run the tank farm.

The following organizational chart depicts the staff. The Governing Board is elected by



the membership in accordance with the bylaws. The General Manager supervises the staff and is the Chief Executive Officer responsible for carrying out the directives of the board, planning, supervising staff, and managing the activities of the company. The General Manager will be the first employee hired and will work alone to organize the company for initial operation.

The next employees hired are indicated in blue on the organization chart. These are the Operations Manager and the Administrator/Accountant. Initially the Operations Manager would be responsible for plant operation and maintenance. As RAFS gains members, the staff will be increased to meet the growing work load. The next employees hired are depicted in yellow. These are the Maintenance Technicians and the Bookkeeper. The financial plan calls for adding one Maintenance Technician when there are six members and second one (depicted in red) at a level of 24 members. These personnel will also be responsible for training local residents to conduct daily operation and maintenance activities.

The Administrator would be responsible for administration, accounting, and management of finances. This employee would oversee budgeting, cash management, payables, and

receivables. The plan calls for adding a Bookkeeper when RAFS has 12 or more members.

The Community Liaison person provides a marketing and member relationship function. The need for this function is anticipated but not specified at particular level of membership and therefore has its own color code, (orange). The need for this position depends on how easily and quickly membership grows. The position would not be filled until requested by the General Manager and deemed appropriate by the board.

Section 4 Financial Analysis

The financial analysis estimates how RAFS could take advantage of potential economies of scale to minimize the cost impact of operating the new tank farms in accordance with the Denali Commission's sustainability criteria. Three major factors tend to increase the cost over the historical village operating practices. These are enforcement of government regulations, insurance, and the renewal and replacement (R&R) fund. The first step was to estimate the cost to operate the tank farms in full compliance with the new regulations and with the Commission's sustainability policy. By applying economies of scale, by reducing multiple operators to a single operator, and by shifting appropriate expenses from the villages to RAFS, a cost estimate for RAFS operating the tank farms was derived. The average cost for seven villages was used as a typical village operating cost.

To derive an estimate for the total cost to operate, the overhead cost for RAFS was added. Three scenarios were estimated. The first is conservative, the second is moderate, and the third is optimistic. The moderate cost estimate was then spread over a range of 24 villages to determine when the RAFS overhead cost per village was reduced enough to lower the total operating cost below that of an individual village. The RAFS cost was applied to four data points, one, six, 12, and 24 villages. Assuming an equal distribution of cost between these data points, the costs were iterated over the full range. See Figure 1 Chart of Comparative Cost for the moderate view of the break even point.

Because this is a new operating environment, the cost estimates could not be based on real experience. Yukon Fuel Company was most cooperative in sharing its experience to improve the estimates. They also reviewed the preliminary financial analysis and recommended revisions. Their help was very valuable.

Appendix B is the table of estimated costs for operating tank farms in seven villages. In the first column entitled SOLO are the estimates for each village to operate its own tank farm by itself. These estimates are based on the assumption that the tank farms are operated in full compliance with the Commission's sustainability policy. The second column entitled RAFS is the estimated cost for the same operation if RAFS operates the tank farm. Several items in the RAFS column are blank because these elements of the operating cost would be centralized under RAFS and become part of RAFS overhead. Insurance is the largest such element. Others include accounting, audits, and maintenance of spill response plans.

The following Table 1 Typical Village – Conservative Estimate is the comparison of cost estimates for the Typical Village used for the analysis. It is the average of the estimates for the seven villages. The following two tables are the moderate and optimistic estimates for the same typical village.

Table 1 Typical Village – Conservative Estimate

	SOLO	RAFS
THROUGHPUT		
annual estimate in gallons	215,000	215,000
TANKS & CAPACITY		
# of tanks	15	15
installed capacity (gallons)	332,000	332,000
EXPENSES		
OPERATIONS & MAINTENANCE		
1 marine transfers	1,824	1,200
2 int. tank transfers ($/gal)	5,049	4,260
3 daily farm checks ($/Tank)	9,000	7,125
4 empty water sumps	1,200	1,200
5 inventoy fuel / meter reading	1,950	536
6 snow removal	2,736	2,736
7 routine mtc, filters, lub, water draws	3,486	2,600
8 minor repairs/grounds mtc	1,500	1,100
9 pumps/valves/filters, strainers, meter rep/rpr	2,355	1,570
10 misc. tools, supplies, sorbents	2,500	1,500
11 vehicle expense	1,560	1,200
12 phone/fax	1,200	1,200
13 postage/freight	1,200	1,200
14 auditing fees	6,000	-
15 insurance, GL & property	32,250	-
16 utilities	600	600
17 misc.	2,500	2,500
18 admin/accouting (25hrs/mo @ $20)	6,000	-
REGULATORY COMPLIANCE		
19 spill response training	5,100	-
20 internal tank inspection	7,500	6,000
21 external tank inspection	378	378
22 SPCC/FRP/USCG plan/updates	4,543	-
23 spill response cache	2,000	1,000
24 cargo pipeline annual test	3,000	2,750
TOTAL O & M	$ 105,431	$ 40,654
RENEWAL & REPLACEMENT		
25 40% in 40 years	14,283	14,283
Total O&M and R&R Costs	$ 119,714	$ 54,937
Total O&M and R&R in $/gallon	$ 0.56	$ 0.26

Table 2 Typical Village – Moderate Estimate

	SOLO	RAFS
THROUGHPUT		
annual estimate in gallons	215,000	215,000
TANKS & CAPACITY		
# of tanks	15	15
installed capacity (gallons)	332,000	332,000
EXPENSES		
OPERATIONS & MAINTENANCE		
1 marine transfers	1,824	1,200
2 int. tank transfers ($/gal)	5,049	4,000
3 daily farm checks ($/Tank)	9,000	6,000
4 empty water sumps	1,200	800
5 inventoy fuel / meter reading	1,950	500
6 snow removal	2,736	2,000
7 routine mtc, filters, lub, water draws	3,486	2,600
8 minor repairs/grounds mtc	1,500	1,100
9 pumps/valves/filters, strainers, meter rep/rpr	2,355	1,570
10 misc. tools, supplies, sorbents	2,500	1,500
11 vehicle expense	1,560	1,200
12 phone/fax	1,200	1,200
13 postage/freight	1,200	1,200
14 auditing fees	6,000	-
15 insurance, GL & property	32,250	-
16 utilities	600	600
17 misc.	2,500	2,000
18 admin/accouting (25hrs/mo @ $20)	6,000	-
REGULATORY COMPLIANCE		
19 spill response training	5,100	-
20 internal tank inspection	7,500	6,000
21 external tank inspection	378	378
22 SPCC/FRP/USCG plan/updates	4,543	-
23 spill response cache	2,000	500
24 cargo pipeline annual test	3,000	2,000
TOTAL O & M	$ 105,431	$ 36,348
RENEWAL & REPLACEMENT		
25 40% in 40 years	14,283	14,283
Total O&M and R&R Costs	$ 119,714	$ 50,631
Total O&M and R&R in $/gallon	$ 0.56	$ 0.24

Table 3 Typical Village – Optimistic Estimate

	SOLO	RAFS
THROUGHPUT		
annual estimate in gallons	215,000	215,000
TANKS & CAPACITY		
# of tanks	15	15
installed capacity (gallons)	332,000	332,000
EXPENSES		
OPERATIONS & MAINTENANCE		
1 marine transfers	1,824	1,200
2 int. tank transfers ($/gal)	5,049	4,000
3 daily farm checks ($/Tank)	9,000	5,000
4 empty water sumps	1,200	800
5 inventoy fuel / meter reading	1,950	500
6 snow removal	2,736	1,500
7 routine mtc, filters, lub, water draws	3,486	2,600
8 minor repairs/grounds mtc	1,500	1,000
9 pumps/valves/filters, strainers, meter rep/rpr	2,355	1,570
10 misc. tools, supplies, sorbents	2,500	1,000
11 vehicle expense	1,560	1,200
12 phone/fax	1,200	1,200
13 postage/freight	1,200	1,200
14 auditing fees	6,000	-
15 insurance, GL & property	32,250	-
16 utilities	600	600
17 misc.	2,500	2,000
18 admin/accouting (25hrs/mo @ $20)	6,000	-
REGULATORY COMPLIANCE		
19 spill response training	5,100	-
20 internal tank inspection	7,500	5,000
21 external tank inspection	378	378
22 SPCC/FRP/USCG plan/updates	4,543	-
23 spill response cache	2,000	500
24 cargo pipeline annual test	3,000	1,800
TOTAL O & M	$ 105,431	$ 33,048
RENEWAL & REPLACEMENT		
25 40% in 40 years	14,283	14,283
Total O&M and R&R Costs	$ 119,714	$ 47,331
Total O&M and R&R in $/gallon	$ 0.56	$ 0.22

The overhead cost for RAFS are estimated separately. These cost are shown below in Table 4. It is important to note that the overhead cost for RAFS includes management personnel which are not included in the estimate of village operating cost. The additional expense of senior management personnel is necessary to operate RAFS properly and ensure sustainability. This analysis estimates that at least six and maybe as many as 12 villages must join RAFS before the cost per village is spread out enough to be equal to or less than villages operating alone.

Table 4 Estimated RAFS Overhead Expenses

ESTIMATED RAFS OVERHEAD EXPENSES						
	Number of sites		1	6	12	24
	Total through-put		215,000	1,250,000	2,500,000	5,000,000
		Unit Cost				
General Manager			$ 90,000	$ 90,000	$ 95,000	$ 110,000
Operations Manager					$ 70,000	$ 75,000
Maintenance Technician					$ 90,000	$ 145,000
Administrator/Accountant				$ 60,000	$ 70,000	$ 70,000
Bookkeeper					$ 40,000	$ 40,000
Benefits (20% of salary)			$ 18,000	$ 30,000	$ 65,000	$ 80,000
Spill Response Training		$ 2,100	$ 2,100	$ 12,600	$ 25,200	$ 50,400
Regulatory Compliance		$ 810	$ 810	$ 4,860	$ 9,720	$ 19,440
Travel (four trip per site annually)		$ 800	$ 3,200	$ 19,200	$ 38,400	$ 76,800
Insurnace, GL & property				$ 180,000	$ 259,200	$ 466,560
Rent			$ 21,600	$ 21,600	$ 23,760	$ 25,920
Auditing		$ 2,000	$ 6,000	$ 12,000	$ 24,000	$ 48,000
Utilities			$ 3,000	$ 3,000	$ 4,000	$ 5,000
Supplies			$ 2,500	$ 2,500	$ 3,000	$ 4,000
Misc.			$ 1,500	$ 2,500	$ 3,000	$ 3,500
			$ 148,710	$ 438,260	$ 820,280	$ 1,219,620
	RAFS o/h ($/gal)		$ 0.69	$ 0.35	$ 0.33	$ 0.24

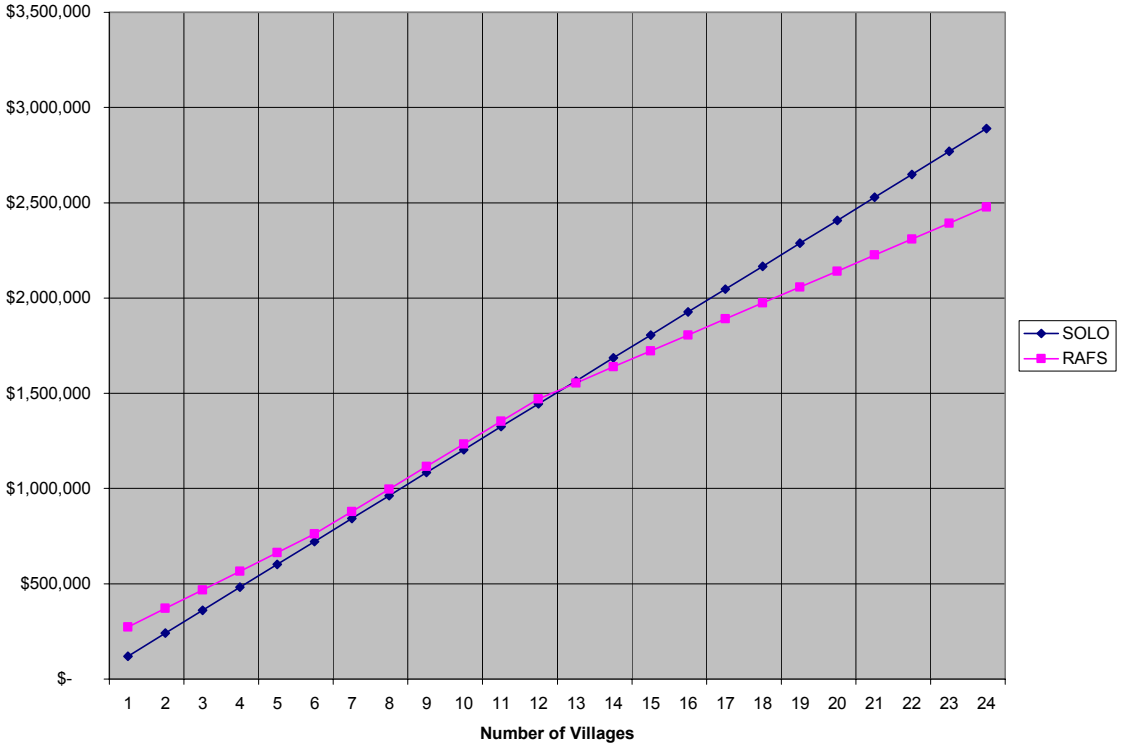
The overhead cost estimated above are used to calculated a total estimated cost per gallon of fuel to operate multiple villages.

Table 5 Unit Cost for Multiple Villages – Moderate Scenario

Nos. of Villages	Typical Village Cost w/RAFS $/gal	RAFS Overhead $/gal	TOTAL $/gal	Typical Village Operating alone
1	$0.24	$0.69	$0.93	$0.56
6	$0.24	$0.35	$0.59	$0.56
12	$0.24	$0.33	$0.57	$0.56
24	$0.24	$0.24	$0.48	$0.56

A chart comparing the total cost for villages operating tank farms alone with the total cost of the village tank farms operated by RAFS is in Figure 1 on the following page. This chart is based on the moderate estimate for operating cost. It shows that RAFS begins to operate for less cost after about 12 villages join.

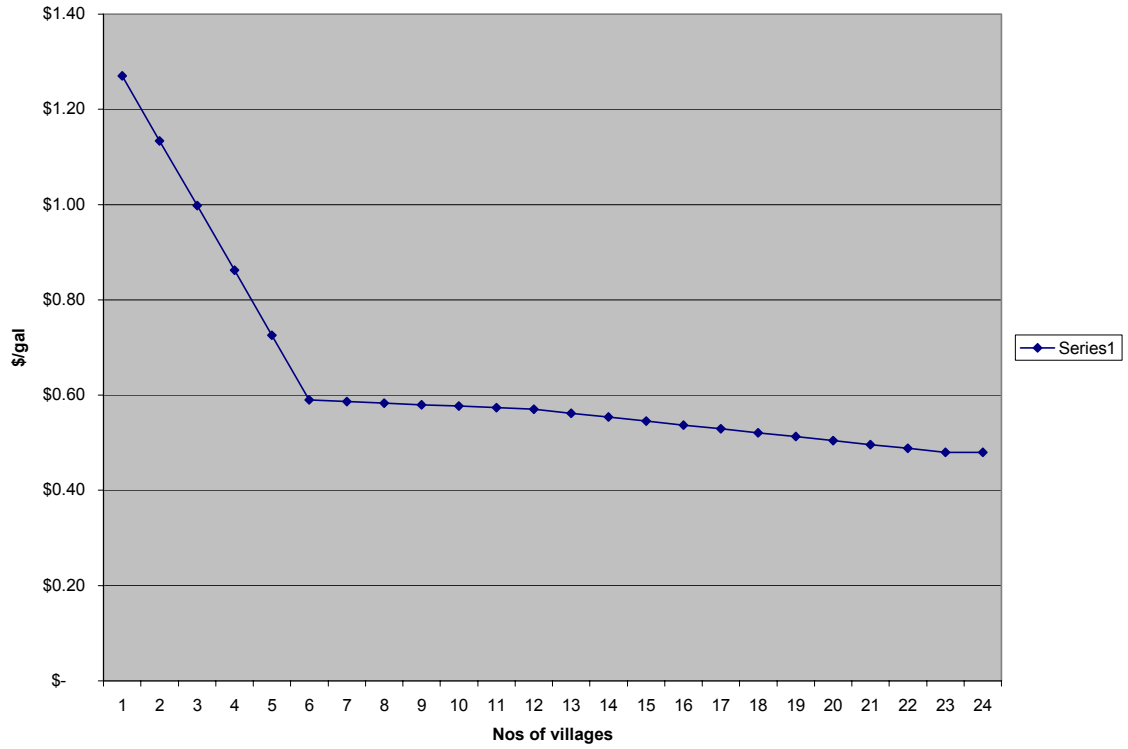
Figure 1 Chart of Comparative Cost – Moderate Estimate



The chart above shows the overhead expenses of RAFS compared with villages operating alone. Beginning at about six villages, the cost for RAFS operated versus the village operating alone is about equal. After 12 villages (a little over 2,500,000 gallons total annual throughput) the cost of RAFS begins to drop below that for the individual villages. From then on it continues to be less. This is true even though the RAFS overhead increases as it serves more villages (see Table 4 Estimated RAFS Overhead Expenses). This cost does not take into account savings obtained from contract services nor from fuel cost reduction due to bulk purchasing for the villages. Depending on the success of these two operations, the RAFS operating cost could be further reduced.

The chart below (Figure 2 RAFS Unit Operating Cost) shows the cost of RAFS in $/gallon as a function of the number of villages. It is apparent from this chart that cost benefits are leveling out as membership approached 24 villages.

Figure 2 RAFS Unit Operating Cost – Moderate Scenario



This chart shows the RAFS unit operating cost decreases as more villages participate. Although the analysis does not go beyond 24 villages, it does indicate that the economies of scale level out and may not improve much as more than 24 villages join. However, the potential for bulk fuel purchasing advantages begin to appear at that point and could improve as membership grows. The fuel purchasing aspect of RAFS is modeled below with the use of hypothetical operating statements prepared from the village prospective.

Section 4.1 *Fuel Purchasing*

A major interest in the RAFS model stems from the potential to buy bulk fuel for villages as a lower rate than is available to individual villages. Investigating the potential savings from bulk fuel purchases revealed a set of problems to overcome. The two most important elements for reducing the delivered cost of fuel are credit and improved delivery efficiencies. Below is a more comprehensive list of the factors involved.

1. Prompt and full payment (good credit)
2. Single point of delivery
3. One delivery annually
4. Ordering correct volume of fuel
5. Plan deliveries to optimize barge operation
6. Competent plant operators available to meet the barge
7. Marine cargo header close to shore (within 200 feet)

The foremost obstacle to leveraging lower bulk fuel delivered prices is the credit. Poor payment or credit risk is the most often cited reason for higher cost. RAFS could organize fuel purchases for multiple villages, but payment remains a problem. Unless RAFS was funded to purchase fuel, it could not overcome the individual village credit problems.

In the beginning, RAFS would need additional funds to operate until it had sufficient members to achieve the economies of scale necessary to break even. Below are several Statements of Income prepared to illustrate this. The statements show the village perspective and include fuel purchasing and total cost of fuel for sale from the tank farm. Statements are prepared for three villages, six villages, 12 villages, and 24 villages. From review of these Statements of Operation you can see that RAFS may need alternate sources of revenue in the early stages. As the membership grows, the need for alternate income diminishes and the economies of scale allow for reduced fuel sales cost. As its membership grows, RAFS has the potential to generate excess retained earnings. To show the benefit of bulk fuel purchasing in these models, the bulk fuel cost is reduced as the number of members increases.

Other models depicted in Table 10 and Table 11 show RAFS operating as a sustainable entity. This eliminates the need to collect the R & R fund. Besides elimination of the R & R fund, a charge for bulk fuel purchasing is added to the picture and a contribution to cash reserve is added.

A critical element of this analysis that must always be recognized is that the RAFS operating cost is compared to a village operating on its own in full compliance with the Denali Commission's sustainability criteria. If villages are allowed to operate without funding R&R, without buying insurance, and without properly maintaining the tank farm they will be able operate at a lower cost without RAFS.

Assumptions for the Statement of Operations are:

- Cost of fuel deliver to the marine header is $1.65/gallon
- Village operating cost includes full compliance with sustainability criteria
- RAFS overhead is derived from Table 4 Estimated RAFS Overhead Expenses
- R&R is the same for each village

Table 6 Statement of Operations – Three villages

THREE TYPICAL VILLAGES		Unit cost	Nos of villages	RAFS Unit cost	RAFS With RAFS
			3		
OPERATING REVENUE					
645,000	gallons	$ 2.30	$ 1,483,500	$ 2.30	$ 1,483,500
	Cost of fuel	$ 1.65	$ (1,064,250)	$ 1.65	$ (1,064,250)
	O&M	$ 0.56	$ (361,200)	$ 0.24	$ (154,800)
	RAFS overhead		$ -		$ (220,710)
	R&R		$ (42,849)		$ (42,849)
TOTAL COST OF FUEL FOR SALE			$ (1,468,299)		$ (1,482,609)
	Operating margin		$ 15,201		$ 891
Nos of villages					
15	Income from contract services		$ -	$ 2,500.00	$ 37,500
	TOTAL MARGINS		$ 15,201		$ 38,391

Table 7 Statement of Operations – Six Villages

SIX TYPICAL VILLAGES		VILLAGE OPERATION Unit cost	Nos of villages	RAFS OPERATION Unit cost	RAFS
			6		
OPERATING REVENUE					
1,250,000	gallons	$ 2.30	$ 2,875,000	$ 2.30	$ 2,875,000
	Cost of fuel	$ 1.65	$ (2,062,500)	$ 1.60	$ (2,000,000)
	O&M	$ 0.56	$ (700,000)	$ 0.24	$ (300,000)
	RAFS overhead		$ -		$ (438,260)
	R&R		$ (85,698)		$ (85,698)
TOTAL COST OF FUEL FOR SALE			$ (2,848,198)		$ (2,823,958)
	Operating margin		$ 26,802		$ 51,042
Nos of villages					
25	Income from contract services		$ -	$ 2,500.00	$ 62,500
	TOTAL MARGINS		$ 26,802		$ 113,542

Table 8 Statement of Operations – Twelve Villages

12 TYPICAL VILLAGES		Unit cost	Nos of village	RAFS Unit cost	RAFS With RAFS
			12		
OPERATING REVENUE					
2,500,000	gallons	$ 2.30	$ 5,750,000	$ 2.30	$ 5,750,000
	Cost of fuel	$ 1.65	$ (4,125,000)	$ 1.60	$ (4,000,000)
	O&M	$ 0.56	$ (1,400,000)	$ 0.24	$ (600,000)
	RAFS overhead		$ -		$ (820,280)
	R&R		$ (171,396)		$ (171,396)
TOTAL COST OF FUEL FOR SALE			$ (5,696,396)		$ (5,591,676)
	Operating margin		$ 53,604		$ 158,324
Nos of villages					
25	Income from contract services		$ -	$ 2,500.00	$ 62,500
	TOTAL MARGINS		$ 53,604		$ 220,824

Table 9 Statement of Operations – 24 Villages

24 TYPICAL VILLAGES		Unit cost	Nos of villages	RAFS Unit cost	RAFS With RAFS
			24		
OPERATING REVENUE					
5,000,000	gallons	$ 2.30	$ 11,500,000	$ 2.30	$ 11,500,000
	Cost of fuel	$ 1.65	$ (8,250,000)	$ 1.55	$ (7,750,000)
	O&M	$ 0.56	$ (2,800,000)	$ 0.24	$ (1,200,000)
	RAFS overhead		$ -		$ (1,219,620)
	R&R		$ (342,792)		$ (342,792)
TOTAL COST OF FUEL FOR SALE			$ (11,392,792)		$ (10,512,412)
	Operating margin		$ 107,208		$ 987,588
Nos of villages					
25	Income from contract services		$ -	$ 3,000.00	$ 75,000
	TOTAL MARGINS		$ 107,208		$ 1,062,588

RAFS starts with a heavy burden of overhead which is offset by other income from contract services. These services are assumed to be pipeline testing at 25 customer tank farms. With this other income, the fuel price may be reduced by 10 cents per gallon when member reaches 24 villages. However, the delivered cost of fuel in not decreased in this model. Therefore, RAFS begins to generate excessive retained earnings. This cash could be used to build operating reserves, build renewal and replacement reserves, or reduce the cost of fuel.

This is an idealized view which looks farther into the future than any crystal ball allows, but it does illustrate that the RAFS model has the potential to not only realize savings for communities, but also ensure improved tank farm operations.

Another view of the operating statements provides a picture with bulk fuel purchasing advantages for the membership. As noted above, the two models below depict RAFS operating as a sustainable entity. As such, no renewal and replacement fund is collected. Nevertheless, the need for renewal and replacement reserves remains. The two models below show RAFS charging a bulk fuel management fee to obtain the reduction in fuel cost. RAFS also charges a cash reserve fee to contribute to operating reserves and to future renewal and replacement needs.

Table 10 Moderate Forecast – 12 villages

					RAFS	
12 TYPICAL VILLAGES		Unit cost	Nos of village	Unit cost	With RAFS	
			12			
OPERATING REVENUE						
2,500,000	gallons	$ 2.30	$ 5,750,000	$ 2.30	$	5,750,000
	Cost of fuel	$ 1.65	$ (4,125,000)	$ 1.60	$	(4,000,000)
	O&M	$ 0.56	$ (1,400,000)	$ 0.24	$	(600,000)
	RAFS overhead				$	(820,280)
	Bulk fuel mngt charge			$ 0.02	$	(50,000)
	cash reserves contribution			$ 0.05	$	(125,000)
	R&R		$ (171,396)			
TOTAL COST OF FUEL FOR SALE			$ (5,696,396)		$	(5,595,280)
	Operating margin		$ 53,604		$	154,720
Nos of villages						
25	Income from contract services		$ -	$ 2,500	$	62,500
	TOTAL MARGINS		$ 53,604		$	217,220
	Fuel rebate to Participantts			$ 0.05	$	125,000
	NET OPERATING MARGINS				$	92,220

Table 11 Moderate Forecast – 24 villages

OPERATING REVENUE							
5,000,000	gallons	$	2.30	$ 11,500,000	$	2.30	$ 11,500,000
	Cost of fuel	$	1.65	$ (8,250,000)	$	1.55	$ (7,750,000)
	O&M	$	0.56	$ (2,800,000)	$	0.24	$ (1,200,000)
	RAFS overhead			$ -			$ (1,219,620)
	Bulk fuel mngt. charge				$	0.015	$ (75,000)
	cash reserves contribution				$	0.10	$ (500,000)
	R&R			$ (342,792)			
TOTAL COST OF FUEL FOR SALE				$ (11,392,792)			$ (10,744,620)
	Operating margin			$ 107,208			$ 755,380
Nos of villages							
25	Income from contract services			$ -	$	3,000.00	$ 75,000
	TOTAL MARGINS			$ 107,208			$ 830,380
	Fuel rebate to Participantts				$	0.15	$ 750,000
	NET OPERATING MARGINS						$ 80,380

The advantages realized in fuel cost reduction are shown as a rebate to members rather than a reduction in fuel price. Actual use of the cash reserve would be determined by members.

Section 4.2 *Startup Cost*

Conservation estimates for cost and membership recruitment

Startup costs	
ORGANIZATION STARTUP	
Computer	15,000
Tools	25,000
Office equipment	15,000
TOTAL	$ 55,000

Earlier startup cost estimates included rent, utilities, travel, and labor. These cost are now included in the more detailed overhead estimates in Table 4 Estimated RAFS Overhead Expenses. The other costs listed above are for initial equipment purchase.

Below is a calculation of the net operating margins for RAFS.

Table 12 Estimated Schedule of RAFS Membership

Year	1	2	3	4	5	6
Villages with RAFS	3	5	8	12	13	18
Operating subsidy required	($143,190)	($150,930)	($86,000)			
Operating revenue achieved				$51,600	$94,600	$309,600

The dollar amounts in the above table are the net difference between the number of villages in row one operating individually and operating with RAFS. When RAFS has approximately 10 villages, it begins to achieve the economies needed to operate for less cost. The table above illustrates that will take RAFS from three to four years to recruit enough villages to operate at a lower cost. Over this period, RAFS would have to receive a subsidy of $380,120 if it is going to operate its initially at the same or at a lower cost than villages could operate alone. Adding the $55,000 for initial equipment from above, the total startup assistance required is estimated to be $435,120 over the first three years. Each year requires the following amount.

Year	Amount
1	$198,190
2	$150,930
3	$86,000
TOTAL	$435,120

The above estimate does not take into account other income from contract services. To apply all the variables in different combinations would create too much analysis that would confuse rather than illustrate the needs. It is important to understand that this analysis serves to illustrate the need for startup assistance. It estimates the amount and time period assistance is required. The numerous variables affecting the early operation of RAFS will influence the actual requirement which are expected to vary from any estimates.

Moderate estimates for cost and membership recruitment

For purposes of showing a less conservative estimate of startup requirements the estimate below is based on the moderate scenario and a more aggressive membership recruitment. The net operating margin estimates and membership recruitment are provided in the table below.

Table 13 Moderate Estimate of RAFS Membership

Year	1	2	3	4
Villages with RAFS	5	10	16	24
Operating subsidy required	($61,490)	($30,100)		
Operating revenue achieved			$120,400	$412,800

Just as above, the dollar amounts in this table are the net difference between the number of villages in the first row operating individually and operating with RAFS. Between 10 and 16 villages RAFS begins to achieve the economic advantage. The table above illustrates that will take RAFS from two to three years to recruit enough villages to operate at a lower cost. Over this period, RAFS would need a subsidy of $91,590 to operate the same or at a lower cost than villages could operate alone. Adding the $55,000 for initial equipment from above, the total startup assistance required is estimated to be $146,590 over the first two years. Each year requires the following amount.

Year	Amount
1	$116,490
2	$30,100
TOTAL	$146,590

Section 5 Legal Issues

RAFS is proposed to be a corporation organized under the Alaskan Nonprofit Corporation Act (AS 10.20 et. seq.). As a state nonprofit corporation and based on proposed services, RAFS will have to apply to the IRS for tax exempt status as a Social Welfare Organization under the IRS 501(c)(4) regulation. Preliminary investigation indicates there should not be a problem obtaining this classification. This conclusion is based on RAFS contracting to operate and maintain tank farms constructed with public money for the benefit and general welfare of the community.

The nonprofit corporate structure has been recommended for several reasons. It has been suggested that a company that provides services to rural communities that is not profit motivated is more likely to be an acceptable option for tank farm management. Further, there are options for membership rights in a nonprofit company that would allow those who RAFS services to participate in the development of RAFS. It is important to keep in mind that RAFS may be required to provide services to both members and non-members alike as a condition of getting federal tax exempt status.

Another legal issue arose concerning the ownership of the tank farms. It seems that ownership of the bulk fuel storage plants is now allocated to the parties by provisions in the grant agreement, in the business plan, and in the operating agreement. Title in the normal legal sense is not bestowed in a conventional way. Normal evidence of ownership required for many commercial transactions is missing. Purchasing insurance could be hindered by this approach to conveying ownership.

A Limited Liability Company (LLC) is being explored as an alternate way to clarify ownership issues for the tank farms and maintain the different interest of the parties involved. An LLC is a legal entity that could own the tank farm and establish the rights and responsibilities of all parties with an interest in the tank farm. All parties with an interest in the tank farm could be members of the LLC. In the event a party is precluded from membership, an LLC is flexible enough to condition membership and possibly overcome the obstacle to membership. The rights and responsibilities of the members would be defined in the LLC Operating Agreement. Every member's rights and responsibilities would be based on the member's interests and could be written to meet the individual member's needs. With the assets held in the LLC, members would be protected from liability in the same way a shareholder in a corporation is protected from liability for the actions of a corporation. This gives each member protection from the liability associated with oil spills and other risks.

The result is a clearly defined and legally recognized entity that owns the tank farm. All parties with an interest in the tank farm would have their interest defined along with their rights and responsibility. Management of the tank farm would be under the control of the members as prescribed by the LLC Operating Agreement. The members could then decide who would operate the tank farm. The operator could be one of the members or the LLC could contract with a third party (such as the proposed Rural Alaska Fuel Services) to operate the tank farm. The LLC would enter into an agreement with the

selected operator. The operator could also be responsible for maintaining the records of the LLC.

This arrangement creates a single, clearly defined legal entity that would own the tank farm. It protects the protects participating parties from the liabilities associated with operating the tank farm itself, while still providing for each party's respective interest in its operation and a say in its management. If a member owned their own oil, their liability for a spill would remain the same.

This ownership issue was not part of the scope of work for this plan, but increasing interest in its potential to solve legal problems with tank farm ownership merits its mention.

Section 6 Market Survey

To assess community interest in forming an organization to assume management of bulk storage facilities, a market survey was conducted in early September 2003. Representatives were contacted from eight communities that currently have, or will have in the future, storage facilities financed by the Denali Commission. Of a total of 15 villages selected to survey, eight responded. Those communities were Allakaket, Buckland, Deering, Kongiganak, Lower Kalskag, Mekoryuk, Nightmute and Tooksook Bay.

After receiving a brief explanation of the RAFS concept and the benefits anticipated from implementing it, respondents were asked several questions to ascertain their perspectives on:

- The value and benefits of RAFS to their community
- Obstacles to joining RAFS that might be present in their community
- The likelihood their organization would join RAFS
- Other information they would need to make a decision

Generally, community representatives were open to the RAFS concept and interested in learning more about it. Most requested a written proposal that further details the concept, followed by a personal presentation to their governing body. Only then, they said, could they have a clear indication of the likelihood that they would join RAFS.

When asked about the greatest benefit they would receive from RAFS, representatives voiced several, but those mentioned most often were assistance with operations and maintenance and increased operational safety, followed closely by training opportunities.

No representative cited a major obstacle to joining RAFS, but some expressed concern about how insurance would be handled.

Other findings:

- In the majority of surveyed communities, the new storage facility is not yet running. This means no operations infrastructure has been established that would have to be altered under RAFS. The Commission has an opportunity to establish RAFS without disrupting a system already in place.

- Half the communities that responded are members of AVEC. Representatives from these communities better understood the concept of a cooperative and were able to envision how RAFS would operate.

Conclusion – The opportunity exists to further educate villages about the value of RAFS with an emphasis on efficient operations, safety and training for local residents. Key to successfully bringing communities into the RAFS program is personal contact in the villages, along with presentations and material that clearly articulate costs and benefits.

This should be done as soon as possible to ensure that any opposition that might arise is quickly countered with sound facts and information.

RAFS will require a subsidy from The Denali Commission during its startup phase. According to calculations, RAFS operating cost would break even compared with the operating cost for individual villages with a membership of approximately 10 villages. Based on information from the marketing survey and other sources, it appears reasonable to assume that 12 members could be successfully recruited by year four. See Section 4.2 for an estimated time frame for membership recruitment and a discussion of startup assistance requirements.

APPENDIX A

SUMMARY OF SERVICES

MANAGEMENT & ADMINISTRATION:

1) Oversee all affairs related to running the business of the corporation
2) Hire and supervise operating staff
3) Maintain all corporate records
4) Provide accounting and finance services
    a) Manage the corporate funds
        i) Renewal & replacement fund
        ii) Depreciation fund
        iii) Operation & maintenance fund
        iv) Bulk fuel purchase fund
    b) Analyze rate structures
    c) Financial forecasting
    d) Billing & collections
    e) Audits
5) Maintain insurance coverage
6) Prepare budgets
7) Purchase fuel
8) Prepare and maintain plans as required by state and federal regulatory agencies
9) Contract for spill response and for specialized services
10) Manage plant inventory
11) Liaison with government and regulatory agencies

PLANT OPERATIONS

1) Receive fuel deliveries
2) Dispense fuel
3) Provide training
    a) Hazwoper
    b) Spill response
    c) Plant operation & maintenance
4) Supervise & conduct plant maintenance
5) Purchase equipment and supplies
6) Inventory fuel
7) Test fuel
8) Drain secondary containment
9) Maintain plant security
10) Contract as secondary operator

PLANT MAINTENANCE

1) Test and inspect cargo pipelines
2) Test and inspect storage tanks
3) Inspect and service all valves
4) Inspect secondary containment
5) Clean storage tanks
6) Inspect and service marine headers

Section 7 APPENDIX B